

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

DAVID A. COLE

December 9, 2003 Subject: Bethel-Gilead

Project No's: NH-9184(10)E & NH-

9184(20)E

Pin's: 9184.10 & 9184.20 Bid Amendment No. 1

Dear Sir/Ms.:

Please make the following changes to your Bid Package:

In the Schedule of Items, dated 031114, page six, Item number 606.23 delete quantity of 3220.000 and replace with Quantity of 2840.000.

In the Schedule of Items, dated 031114, page seven, Item number 606.79 delete quantity of 17.000 and replace with Quantity of 16.000.

In the Schedule of Items, dated 031114, page nine, Item number 621.511 delete Item Description "Hybrid Rhododendron", and replace with "Deciduous Shrubs."

Make these changes in pen and ink.

Add Special Provision Section 107 "Time" (Limitation of Operations) and (Supplemental Liquidated Damages) one page, dated Dec. 5, 2003.

Add Special Provision Section 203 "Excavation and Embankment" (Dredge Materials) one page, dated 17 November 2003.

Delete Special Provision Section 310 "Plant Mixed Recycled Asphalt Pavement", pages one through three, dated December 17,2002 and replace with the attached Special Provision Section 310 "Plant Mixed Recycled Asphalt Pavement" pages one through three, dated Dec. 5, 2003.

Please make the following changes to the plan sheets.

For Project number 9184.10, Bethel, Plan sheet number 7 of 239 entitled Estimated Quantities & Earthwork Summery. Item number 606.23, delete quantity of 2450 and replace with quantity of 2070. Item number 606.79, delete quantity of 14 and replace with quantity of 13. Item number 502.219 delete 166cm and replace with 67m<sup>3</sup>.



On plan sheet number 33 of 239, Delete the first sentence and replace with "Concrete for Moment Distribution Slab shall be Class 'LP' concrete and paid for incidental to item 635.14 Prefabrication Concrete Modular Gravity Wall."

On plan sheet number 49 of 239, Delete the first sentence and replace with "Concrete for Moment Distribution Slab shall be Class 'LP' concrete and paid for incidental to item 635.14 Prefabrication Concrete Modular Gravity Wall."

Make these changes in pen and ink.

The Department has received the following question.

Q. What items does 502.219 Struct. Concrete Abuts cover?

A. Wingwalls and headwalls for culvert extensions in non-wall areas. The CIP concrete in the areas of the retaining walls will be considered incidental to the cost of the walls.

Consider these changes prior to submitting your bid on December 10, 2003.

Sincerely,

Bruce R. Carter

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**Contracts Engineer** 

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## SPECIAL PROVISION <u>SECTION 107</u> TIME

(Limitation of Operations) and (Supplemental Liquidated Damages)

No pavement shall be excavated or covered by fill as a part of the general grading operations prior to Spring of 2004. Where existing traveled way pavement is excavated or covered by fill as a part of the general grading operations prior to November 15, 2004, the initial course of hot mix asphalt pavement shall be installed and completed on or before November 15, 2004. Supplemental Liquidated Damages shall be assessed to the Contractor in the amount of Five Hundred (\$500.00) Dollars per day for each calendar day, beginning November 16, 2004, and continuing until the above stated initial course of hot mix asphalt pavement is complete. This assessment of Supplemental Liquidated Damages shall be in addition to the liquidated damages per working day, as specified in Section 107 of the Standard Specifications.

Assessments of Supplemental Liquidated Damages shall continue until the initial course of hot mix asphalt pavement is completed.

Grading operations which excavate or fill over existing traveled way pavement being used to carry traffic shall be suspended on November 15, 2004, and not be resumed until the spring of 2005.

### BETHEL & GILEAD -9184.10 &.20 TRIBUTARIES TO THE ANDROSCOGGIN RIVER 17 NOVEMBER 2003

# SPECIAL PROVISION <u>SECTION 203</u> EXCAVATION AND EMBANKMENT (Dredge Materials)

**<u>Description:</u>** Dredge Material (See MDOT Standard Specifications § 101.2) is regulated as a Special Waste.

Fifty cubic yards or less of Dredge Material Beneficially Used in the area adjacent to and draining into the dredged water body is exempt from regulation. Associated with the Route 2 Highway Improvements in Bethel and Gilead, there will be a culvert replacement on streams which are tributaries to the Androscoggin River. The Dredge Material quantity from each of these four locations is expected to be less than 50 cubic yards (38 cubic meters).

#### CONSTRUCTION REQUIREMENTS

<u>Management and Disposal:</u> The contractor shall Beneficially Use all Dredge Material excavated at each culvert replacement in the area adjacent to and draining into the dredged water body. No more than 38 cubic meters (50 cubic yards) of Dredge Material may be excavated at each culvert replacement site.

<u>Method of Measurement:</u> Dredge Material will be measured by the cubic meter of material removed.

<u>Basis of Payment:</u> Dredge Material Beneficially Used will be paid for at the contract unit price bid for Common Excavation.

Payment shall be full compensation for excavation, dewatering, managing, transporting, and placement.

Payment will be made under:

Pay Item Pay Unit Common Excavation Pay Unit cubic meter

## SPECIAL PROVISION <u>SECTION 310</u> PLANT MIXED RECYCLED ASPHALT PAVEMENT

<u>310.01 Description</u> This work shall consist of the removal of existing bituminous pavement from the existing roadway, hauling to an approved location to be stockpiled, processed and placed in one or more courses, the regrading and compaction of existing gravel base to the tolerances shown on the typicals or as directed by the Resident. All plant mixed recycled asphalt pavement shall be placed on an approved base in accordance with these specifications and in reasonably close conformity with the lines, grades, thicknesses, and typical cross sections shown on the plans or established by the Resident.

#### **MATERIALS**

<u>310.02</u> Composition of Mixture The mixture shall be composed of recycled asphalt pavement and emulsified asphalt. The recycled asphalt pavement shall be processed by the Contractor so all material will be no larger than 37.5 mm [1.5 in] and stockpiled so as to minimize segregation. The stockpile shall be free of any materials not generally considered to be asphalt pavement.

A job mix formula shall be furnished by the Department establishing the exact percentage of emulsified asphalt and water to be used in the mixture.

The initial design of the mixture shall contain an approximate 2.5 percent  $[\pm 0.25 \text{ percent}]$  added emulsified asphalt content, an approximate 2.5 percent  $[\pm 0.25 \text{ percent}]$  added water content, and an approximate 1.5 percent  $[\pm 0.15 \text{ percent}]$  added portland cement by weight.

Emulsion, water, and Portland cement shall be added in percentage by weight and verified by tank checks done daily. Cement additive may be done in dry form or introduced as a mixture with water.

<u>310.022 Emulsified Asphalt</u> The emulsified asphalt shall be grade MS-2 or HFMS-2 meeting the requirements of Section 702.04 Emulsified Asphalt.

<u>310.023 Portland Cement</u> The portland cement shall be Type I or II meeting the requirements of AASHTO M85-89.

#### **EQUIPMENT**

310.03 Mixing Plant The mixing plant shall be of sufficient capacity and coordinated to adequately handle the proposed construction. Either a continuous pugmill mixer or a continuous drum type mixing plant shall be used. If a drum mixing plant is used it shall meet

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the requirements of Section 401.07. The mixing plant shall be capable of producing a uniform mixture meeting the requirements of the job mix formula.

<u>307.04 Hauling Equipment</u> Trucks used for hauling the mixture shall meet the requirements of Section 401.08.

307.05 Bituminous Pavers Pavers shall meet the requirements of Section 401.09.

307.06 Rollers Rollers shall meet the requirements of Section 401.10.

#### CONSTRUCTION REQUIREMENTS

307.07 Mixing The recycled asphalt pavement shall be delivered to the mixer at a temperature of not less than 10°C [50°F]. The emulsified asphalt shall meet the mixing temperature requirements listed in Section 702.05 - Application Temperatures. Recycled pavement and emulsified asphalt shall be proportioned and the mixing time set to produce a mixture in which uniform distribution of the emulsified asphalt and coating of the recycled pavement is obtained.

If a drum type mixing plant is used, the recycled asphalt pavement may be heated prior to being mixed with the emulsified asphalt to a temperature not to exceed 90°C [194°F].

Following mixing, the recycled asphalt pavement material shall be directly incorporated into the work. The material shall not be stockpiled after mixing and prior to use.

307.08 Weather Limitations The plant mixed recycled asphalt pavement shall not be placed under any of the following conditions: (a) when there is standing water on the surface, (b) when the air temperature in the shade is less than 10°C [50°F], (c) when the surface is frozen, or (d) when weather conditions otherwise prevent proper handling, finishing, or curing of the mixture.

307.09 Spreading and Finishing The mixture shall be spread and finished in accordance with Section 401.15

<u>307.10 Compaction</u> Compaction of the mixture shall be in accordance with Section 401.16. Rolling may be delayed to avoid lateral displacement as directed by the Resident.

307.11 Joints Joints shall be constructed in accordance with Section 401.18.

<u>307.12 Surface Tolerances</u> The surface tolerances shall be as specified in Section 401.101, except that the maximum allowable variation shall be 10 mm [3/8 in].

<u>307.13 Density Requirements</u> The in-place density of the mixture will be accepted by the Department by the nuclear thin lift method. A control section of pavement of approximately

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100 m [300 ft] will be designated at the start of the paving operations. After the control section has been placed, it will be rolled as directed until the nuclear density readings show an increase in density of less than 15 kg/m³ [1 pcf] for the final 4 roller passes. This density will be used as the target density for the recycled material. The remaining recycled asphalt pavement shall be compacted to a minimum density of 98 percent of the target density as determined in the control section.

<u>307.14 Curing</u> No new pavement shall be placed on the recycled asphalt pavement until a curing period of 7 days has elapsed. The curing period begins after being placed in the roadway. When weather conditions are unfavorable the curing period may be extended by the Resident.

<u>307.15 Method of Measurement</u> Plant Mixed Recycled Asphalt Pavement shall be measured by the square meter [square yard].

<u>307.16 Basis of Payment</u> The accepted quantity of Plant Mixed Recycled Asphalt Pavement will be paid for at the contract unit price per square meter [square yard], complete in-place which price will be full compensation for furnishing all equipment and labor for removing existing pavement, processing, mixing, placing, and compacting, regrading and compacting existing gravel base and for all incidentals necessary to complete the work.

The Department will compensate the Contractor in accordance with <u>Section 109.7.5 - Force Account, paragraph B. Materials</u>, if the Departments mix design requirements for Plant Mix Asphalt Pavements exceeds the 2.5 percent including tolerances for added emulsion, or the 1.5 percent including tolerances for added portland cement. Adjustments in water content exceeding the initial targets shall not be paid for directly, but shall be incidental to Item 310.

Payments will be made under:

Pay Item
Pay Unit

310.13 (80mm) Plant Mixed Recycled Asphalt Pavement Square Yard [Square Meter]